

northwestern Connecticut, the leaves of which might key out at *Q. digitata*, a southern species. If, however, the range of *digitata* were indicated, its elimination would have been instant.

For many trees, however, this difficulty will not present itself and the book may be heartily recommended. Its size, about five by six and one half inches, and its flexible cover make it a convenient book to carry in the field.

RALPH C. BENEDICT.

Stevens' Diseases of Economic Plants

A new book entitled Diseases of Economic Plants, by F. L. Stevens and J. G. Hall,* of the North Carolina Agricultural Experiment Station, has recently appeared. This work is designed to meet the needs of those students who wish to recognize, wherever this can be done with any degree of certainty, and treat diseases of plants without the laborious process of a detailed microscopic study. Those characters are used in diagnosing diseases which are evident to the naked eye or through the aid of the hand lens, and technicalities are avoided so far as possible, thus making the text a usable one to the agricultural students of the lower grade. The work is confined mainly to the bacterial and fungous diseases.

The introductory chapters contain a brief historical sketch of the development of the science of phytopathology; also statistics regarding the damage caused by fungi, symptoms of disease, methods of preventing diseases, formulae of the various fungicides with directions as to the best methods of applying them, and a discussion of the cost and profit resulting from their use.

The body of the work is devoted to a description of the symptoms of the diseases of plants which are of economic importance with directions as to the best methods of controlling them. These diseases are classified according to the natural relationship of the hosts on which they occur and all of the diseases of a given host are treated under that host regardless of the relationships of the fungi which cause the diseases. The terms used in desig-

*Stevens, F. L., & Hall, J. G. Diseases of Economic Plants. Pp. i-ix + 1-513. f. 1-214. The Macmillan Co., New York, 1910. Price \$2.00.

nating the various diseases are those most commonly used or where these are lacking or ambiguous a name is made by adding the termination "ose" to the generic name of the fungus which causes the disease. The work is thoroughly illustrated, the illustrations being of such a nature as to be of material aid in the diagnosis of the various diseases.

The appendix contains a brief discussion of the differences in the physiology of the chlorophyl-bearing and chlorophyllless plants with a few of the most striking morphological characters of the bacteria and fungi. This part of the work is very brief.

One of the points on which the work is to be commended is the fact that the manuscript of the various parts has been submitted to the best specialists in the groups treated for corrections and criticism, thus eliminating many of the errors which might otherwise appear in a work of this kind and ensuring accuracy as to details. The book will doubtless meet the need of a large number of students, especially in our agricultural colleges.

F. J. SEAVER.

Dr. J. A. Harris (Biometrika, November) presents an exhaustive study "On the selective elimination occurring during the development of the fruits of *Staphylea*." The author, keeping in mind the very different problem of the selective elimination of individuals, has striven to show the morphological and physiological value of the selective elimination of certain types of organs produced by individuals. Using statistical methods, now familiar through the work of Francis Galton and Karl Pearson, he recapitulates (in part), after presenting detailed tables of 21,000 locules and their ovules, thus:

"The ovaries with relatively low numbers of ovules are more extensively eliminated than those with high numbers." "The ovaries which remain after elimination are more radially symmetrical than those which are eliminated." "Ovaries with one or more locules with an 'odd' number of ovules are more likely to be eliminated than those with all the locules bearing an 'even' number." "Dimerous ovaries seem less likely, and tetramerous ovaries more likely to develop to maturity than the normal trimerous ones."

So far as the last statement is concerned, the selective elimination there recorded must be of very recent origin, for tetramerous ovaries of the bladder-nut are the exception rather than the rule. And if the elimination continues ever so slowly tetramerous ovaries of the bladder-nut must eventually become perfectly normal abnormalities.

N. T.

PROCEEDINGS OF THE CLUB

NOVEMBER 8, 1910

The meeting was called to order at the American Museum of Natural History at 8:30 P. M., with Dr. E. B. Southwick in the chair. Forty-six persons were present. The minutes of the meeting of October 26 were read and approved.

The announced paper of the evening on "The Native Trees of Northeastern United States" was then presented by Mr. Norman Taylor. The lecture was illustrated by lantern slides.

Adjourned.

PERCY WILSON,
Secretary.

NEWS ITEMS

The Naples Table Association for promoting Laboratory Research by Women wishes to call attention to the opportunities for research in zoölogy, botany and physiology provided by the foundation of this table. The year of the Association begins in April and all applications for the year 1911-12 should be sent to the Secretary on or before *March first, 1911*. The appointments are made by the Executive Committee.

A prize of \$1,000 has been offered periodically by the Association for the best thesis written by a woman, on a scientific subject, embodying new observations and new conclusions based on an independent laboratory research in biological, chemical or physical science. The fourth prize will be awarded in April, 1911. Application blanks, information in regard to the advantages at Naples for research and collection of material, and circulars giving